# User Stories

## Graphics

Worlds will be generated using sprite sheets and animation software.

## Player

Player object will be created using sprite sheets with movement controlled by the user.

## Interaction

Player will be allowed to interact with NPCs and environment.

## Objectives

Player will have a series of objectives and goals to complete throughout the game.

## Menu

A menu will be generated when the game is run to allow the user to start the game.

## NPCs

Non playable characters will be generated with predetermined actions.

## Save State

Users will be able to save the state of a current session and return at a later time.

## Audio

The game will feature in game audio in the form of a soundtrack.

# Assumptions

## 1

Style of the worlds are similar to retro gaming styles similar to old generation games.

## 2

Movement of the player is limited to 2D space including up, down, left and right.

## 3

Dialogue will be provided via text messages on screen.

## 4

Goals will revolve around a central plot along the adventure genre of games.

## 5

Menu will be accessible at any point in the game by the user.

## 6

Computer players will interact with the player after user initiation.

## 7

The game will allow three save states to be held at any one time.

## 8

The user will be able to turn off the audio for the game from the menu.

# Project Estimation

## Graphics - **14 days**

Designing the look of the game will take a creative touch as well as a way to work with the mechanics of the game. Learning to design the areas as well as implementing them will require third party software to achieve.

## Player - **3 days**

Designing the look of the player will be an extension of level design. Third party software will also be used to design the look of the character.

## Interaction - **21 days**

Interaction will require coding certain events when the correct conditions are met. Along with the implementation of these events will be the stylistic choices of these events as they will be the primary actions that further the plot.

## Objectives - **12 days**

Objectives will be designed to utilize game mechanics along side giving the player goals to achieve to keep playing. These will require creative thinking to design enjoyable and interesting goals the player must meet in order to advance further into the game.

## Menu - **7 days**

The menu will require a bit of a creative touch but mostly as a launching point for the rest of the game. It will be designed to welcome the player to the game as well as allow save states to be chosen. This will be the first GUI designed for the game to introduce the feel to the game.

## NPCs - **13 days**

Computer programmed players will be implemented using predetermined responses and actions towards the player. These objects will be triggered through certain events the player has initiated. Extensive coding will go into these scripted interactions along with the design of the character models.

## Save State - **10 days**

There will be modules coded to be able to save the state of a current session and allow it to be loaded again from a later time. Multiple instances will be coded to allow any modified data to be saved at certain intervals during gameplay. This will all be done behind the scenes from the player.

## Audio - **3 days**

The audio for the game will be designed using third party software. The game audio will change depending on the area of the game the player is currently. The audio will loop forever throughout gameplay unless disabled by the player. The audio class will be implemented alongside its design.

Accounting for a velocity of 0.7 but including days outside of the regular week the project estimation is set to **108 days.**

# Iterations

This project will be designed using the iterative process model. With this design system there allows for creative freedom on certain aspects of the process while giving working prototypes along the process to test and further design the game mechanics.

## Iteration 1 - 12 days

The initial gameplay window is designed. The frames per second ratio is established. The menu is designed along with interactive buttons to start the game, save a current game, and enable/disable audio. Initial level design will begin. Basic layouts of the beginning levels will be created.

## Iteration 2 - 15 days

First 3 levels will be completed including area space, color schemes, objects for scenery including foliage and structures, and boundaries for the player. Beginning stages of player design along with mechanics for movement.

## Iteration 3 - 15 days

Player design will be completed along with player mechanics. Basic objective designs will begin to test the interaction with the player and the environment. NPC design will begin to allow placement in levels and test interaction with player.

## Iteration 4 - 17 days

NPC design and implementation will be completed. First three levels will be completed in terms of being explored by the player, placement of scenery and NPCs along with test objectives. Beginning stages of implementing save state class. Testing saving state of game with modified values.

## Iteration 5 - 14 days

Designing the audio for the game will begin. Third party music software will be used to create soundtracks. Designing the audio class will begin along with incorporating the enable/disable mechanic for game audio. Level design will continue with new levels.

## Iteration 6 - 14 days

Expansion on the game will continue including designing new levels as well as new NPCs. Interactions between the player and other characters and the environment will be updated as they are designed and implemented. Two additional levels will be completed. Objects will be updated to reflect actual in-game goals.

## Iteration 7 - 21 days

Game audio will be completed. Save state mechanics will be completed. There will be a solid platform to build the rest of the game on from this point. Progress will be determined by the creative process in terms of a plot along with the look of the overall game. An ending will be created. A finished product will be delivered once testing of all levels has been completed.

# Big Stories

-There is a big story involving the creation of graphics for the game. Although they will be static there will have to be enough to cover the entire levels. Along with the look of the levels are objects placed within these levels including tree, walls, structures, and other characters. These levels will need to be designed to allow a smooth and natural flow of movement with the objects residing in them. This could be broken down into creating the general layout of the level, then adding in the scenery at a later time.

-There is another big story involving the interaction of the player with the environment and other characters as this will be an adventure based game and therefore offer an extensive set of unique choices the player can choose from. Alongside other characters there will be certain events triggered from interactions involving the player and the environment. Such events could be altering the level itself and having NPCs interact with the environment as well. This could be split among the type of interaction, whether it be interacting with stationary objects in the levels, NPC characters, and the environment itself.

# Tacking Assumptions

<u>Graphics</u> - The stylistic choice adds a nostalgia factor to the game along with allowing for less experience in order to create full levels with simpler designs.

<u>Player</u> - Limiting the movement adds simplicity to the mechanics as well as making the design for levels more concrete while still allowing for ease of use by the user.

<u>Interaction</u> - text messages lowers the amount of memory the total game will occupy instead of have audio messages play. This will also add simplicity to the coding of these messages.

<u>Objectives</u> - The genre is adventure which allows for creative freedom in designing the objectives while giving incentive to continue playing.

<u>Menu</u> - Allowing the player to access the menu at any time allows for easier access to the save feature along with the audio controls. This way a player can exit the game at any time as well.

<u>NPCs</u> - Limiting the interaction with Non-playable characters to the player's choice makes for a more interactive style of play for the player and also reduces the chance for error with coding certain timed events.

<u>Save State</u> - Three save states is the average number for games of this caliber, especially thinking about space the game data takes up. This will allow a sufficient number of games to be saved while not impeding on the size of the program.

<u>Audio</u> - Giving the player the option to turn the game audio on and off adds to the comfort of the game. Some users will not want audio with the game so the option will be included.

The only assumptions that could remain risks would be the look of the game, as this is a very subjective aspect about game development. Every other assumption could be eliminated with enough time given for development.